

Paufex DIRAS communication protocol

[Supported device types and versions](#)
[Communication line configuration](#)
[Communication station configuration](#)
[I/O tag configuration](#)
[Literature](#)
[Changes and modifications](#)
[Document revisions](#)

Supported device types and versions

This protocol supports data reading and writing to DIRAS devices produced by Paufex s.r.o. Prešov.

Communication line configuration

Communication line category: [Serial](#).

The parameters of an asynchronous line are set according to version and type of device connection.

Communication station configuration

Communication protocol: **Paufex DIRAS**.

The station address is a decimal number in the range 0 up to 127.

If necessary, the synchronization of the real-time of the station can be enabled.

Station protocol parameters

You can set the following parameters:

Table 1

Keyword	Full name	Meaning	Unit	Default value
RC	Retry Count	Maximum count of request retries. If no response returns after a request had been sent, the station's status will change to a communication error.	-	3
MWR	Max Wait Retry	The maximum number of retries of the response reading.	-	8
RT	Retry Timeout	Timeout before resending a request if no response has been received.	ms	1000 ms
WT	Wait Timeout	The delay between the response readings.	ms	400 ms
WFT	Wait First Timeout	The delay after sending the request and before reading the response.	ms	500 ms

A string containing the protocol parameters is being defined as follows:

```
Key_word=value;Key_word=value; ...
```

Example:

```
RC=1;RT=500;
```

If a keyword with an invalid value is in the initialization string, the corresponding default value according to table 1 will be used.

I/O tag configuration

I/O tags: **Ai, Ao, Ci, Co, Di, Do, TiA, ToA, TiR, ToR**.

The address requires three parameters: type, number, and reference.

The values are set in hexadecimal format:

- Type – 0 up to FF
- Number (Nr) – 0 up to FFFF
- Reference (Ref) – 0 up to FF

Data reading and writing

Data reading is done in the individual references by the message 02. Message 03 is used to write a new value to the reference.

A real-time may be read/written also with the I/O tag of TiA (or ToA) type, with address Type=FF, Number=FFFF, Reference=FF.

Message 0B ensures the reading of real-time and Message 0C the writing of real-time.

Literature

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Changes and modifications

- 21.1.2000 – Testing the communication

Document revisions

- Ver. 1.1 – February 8, 2000 – Updating



Related pages:

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